IN THE CLAIMS:

Please amend the claims to read as follows:

1-111. (Cancelled)

112. (Currently amended) A method of determining susceptibility of a HCV (hepatitis C virus) viral population in a patient for an HCV anti-viral drug, comprising:

(a) culturing ~~a sample of~~ host cells in the presence of the HCV anti-viral drug, wherein said ~~sample of~~ host cells ~~has~~ have introduced thereto a plurality of resistance test vectors, each of said resistance test vectors comprising: (1) a patient-derived segment that comprises a HCV gene, and (2) an indicator gene, wherein the activity of the indicator gene is dependent upon the patient-derived segment, and wherein each of the resistance test vectors lacks one or more HCV genes necessary for HCV replication;

(b) measuring the activity of the indicator genes in the ~~sample of~~ host cells; and

(c) comparing the activity of the indicator genes measured in (b) to the activity of indicator genes measured in ~~a corresponding sample of~~ host cells corresponding to the host cells cultured in step (a), cultured in the absence of the HCV anti-viral drug, ~~having introduced thereto a corresponding plurality of resistance test vectors comprising: (1) a patient-derived segment that comprises a HCV gene, and (2) an indicator gene, wherein the activity of the indicator gene is dependent upon the patient-derived segment,~~ wherein greater activity of the indicator genes in the absence of the HCV anti-viral drug relative to that measured in the presence of the HCV anti-viral drug indicates susceptibility of the viral population of the patient for the HCV anti-viral drug.

113. (Previously presented) The method of claim 112 wherein the resistance test vector comprises a gene encoding C, E1, E2, NS2, NS3, NS4, or NS5.

114. (Previously presented) The method of claim 112, wherein the patient-derived segment comprises a viral sequence that comprises an internal ribosome entry site.

115. (Currently amended) A method of determining anti-HCV drug resistance of a HCV viral population in a patient, comprising:

determining susceptibility of the HCV viral population in the patient to said anti-HCV drug by:

(a) culturing ~~a sample of~~ host cells in the presence of said anti-HCV drug, wherein the ~~sample of~~ host cells ~~has~~ have introduced thereto a plurality of resistance test vectors, each of said resistance test vectors comprising: (1) a patient-derived segment that comprises a HCV gene, and (2) an indicator gene, wherein the activity of the indicator gene is dependent upon the patient-derived segment, and wherein each of the resistance test vectors lacks one or more HCV genes necessary for HCV replication; and

(b) measuring the activity of the indicator genes in said host cells; and

(c) comparing the activity of said indicator genes with a standard curve of activity of said indicator genes determined for the anti-HCV drug,

wherein activity which is decreased relative to that shown by the standard curve indicates anti-HCV drug resistance of the HCV viral population in the patient.

116. (Currently amended) A method of determining anti-HCV drug resistance of a HCV viral population in a patient, comprising:

(a) determining susceptibility of the HCV viral population in the patient to said anti-HCV drug at a first time point by:

(i) culturing ~~a sample of~~ host cells in the presence of said anti-HCV drug, wherein the ~~sample of~~ host cells ~~has~~ have introduced thereto a plurality of resistance test vectors, each of said resistance test vectors comprising (1) a patient-derived segment that comprises a HCV gene, and (2) an indicator gene, wherein the activity of the indicator gene is dependent upon the patient-derived segment, and wherein each of the resistance test vectors lacks one or more HCV genes necessary for HCV replication; and

(ii) measuring the activity of the indicator genes in said ~~sample of~~ host cells, wherein the activity of the indicator genes reflects the susceptibility of the HCV viral population to the anti-HCV drug;

(b) determining, by the method of step (a), the susceptibility of the HCV viral population in the patient to said anti-HCV drug at a second time point; and

(c) comparing the susceptibility of the HCV viral population in the patient to said anti-HCV drug at the first time point and the susceptibility of the HCV viral population in the patient to said anti-HCV drug at the second time point,

wherein a decrease in susceptibility to said anti-HCV drug at the second time point relative to that at the first time point indicates anti-HCV drug resistance of the HCV viral population in the patient.

117. (Previously presented) The method of Claim 112, wherein said patient-derived segment encodes one HCV protein.

118. (Previously presented) The method of Claim 112, wherein said patient-derived segment encodes two or more HCV proteins.

119. (Previously presented) The method of Claim 112, wherein said patient-derived segment comprises genes that encode NS3 and NS4a.

120. (Previously presented) The method of Claim 112, wherein said patient-derived segment comprises a gene that encode NS5b.

121. (Previously presented) The method of Claim 112, wherein said indicator gene is luciferase.

122. (Previously presented) The method of Claim 115, wherein said patient-derived segment encodes one HCV protein.

123. (Previously presented) The method of Claim 115, wherein said patient-derived segment encodes two or more HCV proteins.

124. (Previously presented) The method of Claim 115, wherein said patient-derived segment comprises genes that encode NS3 and NS4a.

125. (Previously presented) The method of Claim 115, wherein said patient-derived segment comprises a gene that encode NS5b.

126. (Previously presented) The method of Claim 115, wherein said indicator gene is luciferase.

127. (Previously presented) The method of Claim 116, wherein said patient-derived segment encodes one HCV protein.

128. (Previously presented) The method of Claim 116, wherein said patient-derived segment encodes two or more HCV proteins.

129. (Previously presented) The method of Claim 116, wherein said patient-derived segment comprises genes that encode NS3 and NS4a.

130. (Previously presented) The method of Claim 116, wherein said patient-derived segment comprises a gene that encode NS5b.

131. (Previously presented) The method of Claim 116, wherein said indicator gene is luciferase.